

CLAIMS

1/ A method of manufacturing packaging articles each having a hollow body with a neck-forming open end, the method comprising the following steps:

- 5 - applying a flat piece of thermoplastic material over an open end of a mold recess;
 - heating the material;
 - punching the material by inserting a piston into the mold cavity through its opening so as to form a
10 blank;
 - blowing the resulting blank against the wall of the mold; and
 - opening the mold;

 wherein the mold is constituted by an association of
15 separable elements each constituting a matrix for molding a segment of an article, and the mold is opened by separating the elements, and wherein, while the mold is being opened, the article is sucked against a bottom element of the mold.

20 2/ A method according to claim 1, wherein, prior to being punched, the material is trimmed by being pressed against a sharp element carried by the mold.

25 3/ A method according to claim 1, wherein, prior to being blown, the blank is trimmed by being pressed against a sharp element carried by the mold.

30 4/ A method according to claim 1, wherein, after being blown, the blown blank is cooled by causing a cooling fluid to flow in the wall of the mold.

35 5/ A machine for manufacturing packaging articles, each article having a hollow body provided with a neck-forming open end, the machine being of the type comprising at least one assembly comprising a mold, means for positioning a flat piece of thermoplastic material over

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an open end of a recess of the mold, means for heating the material, a punch having a piston axially displaceable into the mold from a retracted, rest position in which it is situated outside the mold, into an active, blank-forming position in which it penetrates inside the mold, and means for blowing the resulting blank against the wall of the mold, wherein the mold is constituted by separable elements each constituting a matrix for molding a segment of an article, the elements being associated with one another by drive means for controlling displacement thereof to open and close the mold, and wherein the bottom of the mold is provided with at least one suction tube for connection to suction apparatus for holding an article against said bottom, while the mold is being opened.

6/ A machine according to claim 5, including means for handling articles in order to transfer them from the bottom of the mold to a packaging station.

7/ A machine according to claim 5, wherein the mold bottom is provided with channels opening out to the outside in order to enable the air filling the mold to be expelled while the blank is being blown.

8/ A machine according to claim 5, including trimming means for trimming the flat piece of material or the blown blank.

9/ A machine according to claim 5, wherein the mold includes cooling channels integrated in the wall of the mold for cooling the blown blank and suitable for being connected to a source of cooling fluid.